



ISO 9001
Certificate



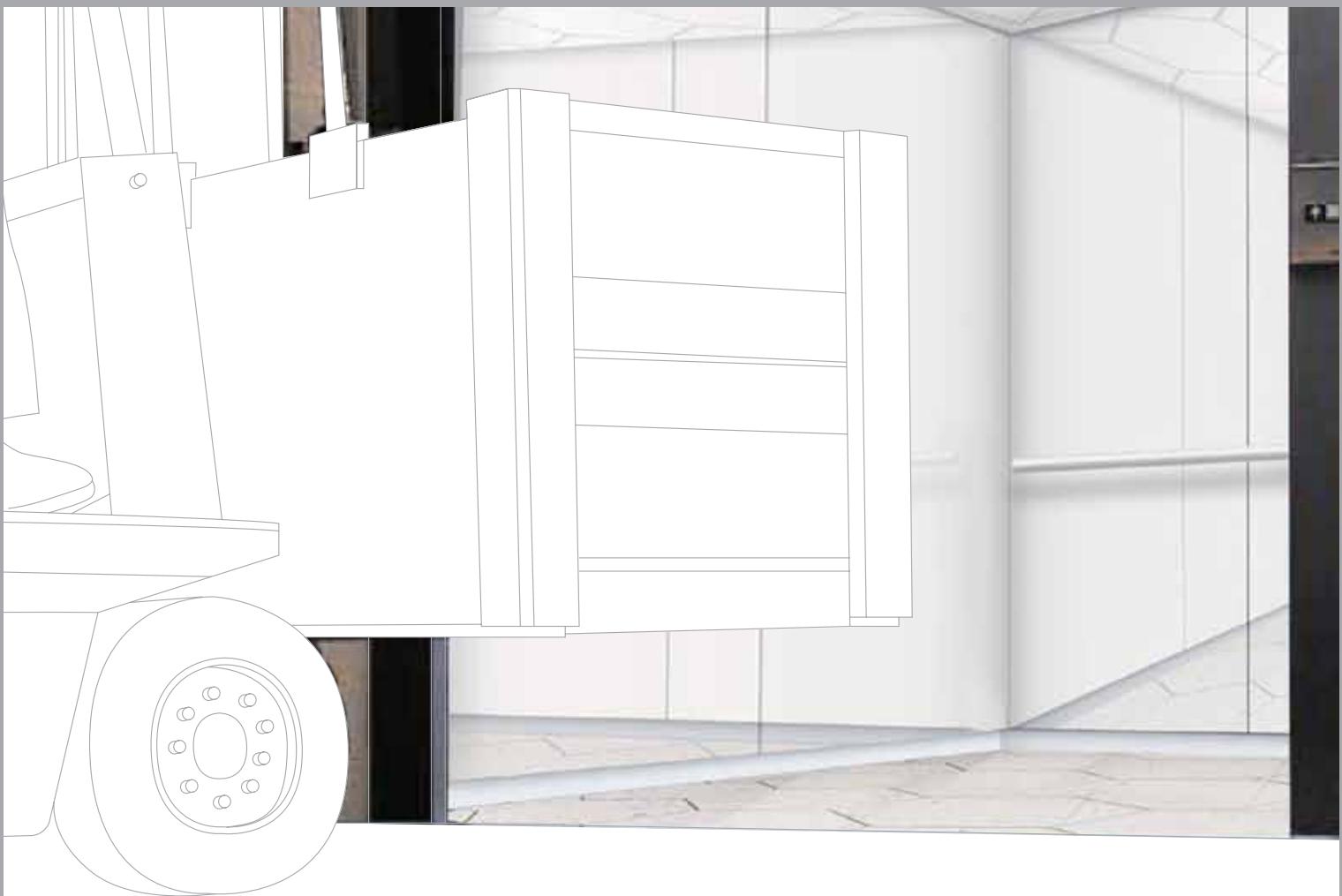
ISO 14001
Certificate



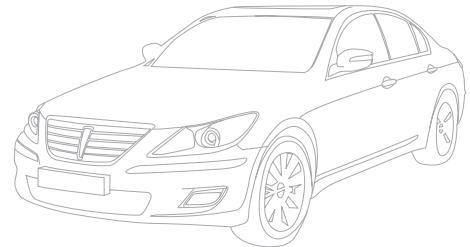
SIGMA Your Elevator Partner

www.sigmaelevator.com

SIGMA constantly endeavors to improve products. Please be reminded that information in this catalog is subject to change without prior notice.
2012.12 Printed in Korea / Revision No. 0



Freight & Car Elevator



Your Elevator Partner... SIGMA

SIGMA Ride tomorrow, Lift future



Korean Engineered Products

SIGMA products are engineered by highly qualified Korean engineers and ensure customers to receive excellent products with reliable quality.



Aesthetics Design Excellence

SIGMA's Design Center in Korea and China are fully equipped with professionals who follow the most up-to-date aesthetic designs to satisfy customers needs.



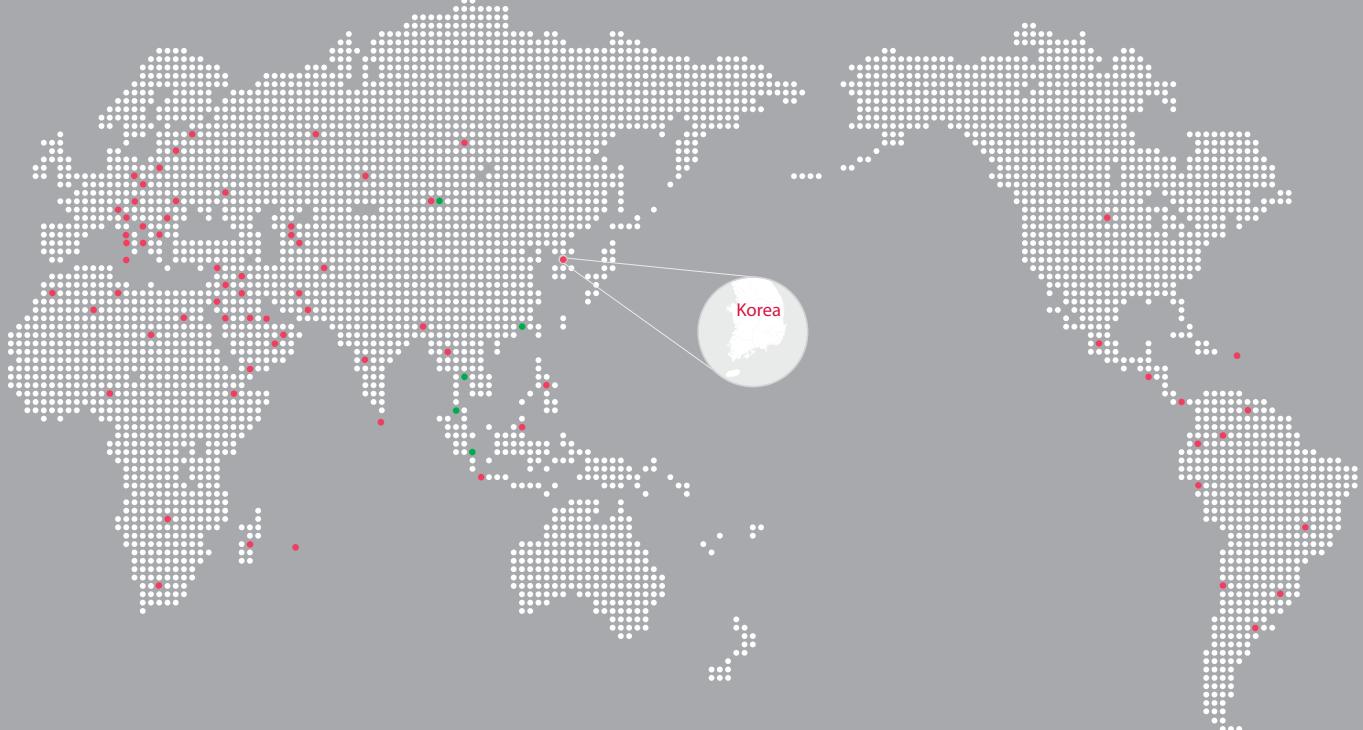
Global Network

SIGMA has been with you for more than 45 years serving over 60 Countries.



SIGMA has already exported approximately 100,000 elevators worldwide since year 1978

● SIGMA SUBS ● DISTRIBUTORS



Khalid Al Attar Tower
UAE



Al Rames Tower
Qatar



Darwaza Tower
Kuwait



Vorobievy Gory
Russia



Triumph Palace
Russia



Antei
Russia



Sheraton Hotel
Puerto Rico



Baiyoke Tower
Thailand



Grand Hyatt Hotel
Indonesia



Emerald Tower
Kazakhstan



LG Beijing Tower
China



ASEM Tower
Korea



Intercontinental Hotel
Korea



Korea World
Trade Center
Korea



Plaza La
Castellana
Venezuela



Torre
Global
Bank
Panama



Ocean
Two
Panama

Freight Elevator

Our dedication and passion to reach customer satisfaction always have been a driving force of our creative and innovative ideas.

As your Elevator Partner, upgrading our ideas in providing elevators that fit our customers needs and devoting ourselves in protecting environment are our ultimate goal.





Elevator Design

Security and stability are the key marks for SIGMA gear products, which ensures customers a strong powering system with sound quality

Specification

CEILING	C-100A
COP	XCP4-A
CAR DOOR	Stainless Steel Hairline
CAR WALL	Stainless Steel Hairline
HALL BUTTON	XHB4-A



| Ceiling |



| Car Door |



The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

Elevator Design



Specification

CEILING	C-100A
COP	XCP4-A
CAR DOOR	NDSP016
CAR WALL	NDSP016
HALL BUTTON	XHB4-A



| Ceiling |



| Car Door |

Specification

CEILING	C-100A
COP	XCP4-A
CAR DOOR	NLGP928
CAR WALL	NLGP928
HALL BUTTON	XHB4-A



| Ceiling |



| Car Door |



! The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

Elevator Fixtures

| Car Wall Colors



Stainless Steel Hairline(Standard)



NDSP002 Oyster White



NDSP016 Paster Green



NDSP017 Grey White



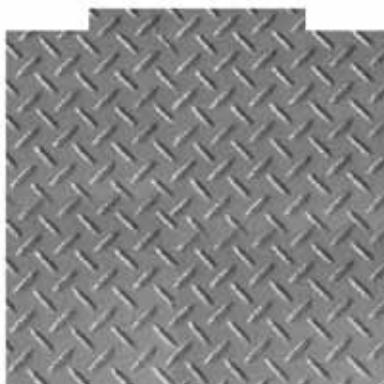
NLGP928 Camel

| COP



XCP4-A

| Floor



Remark

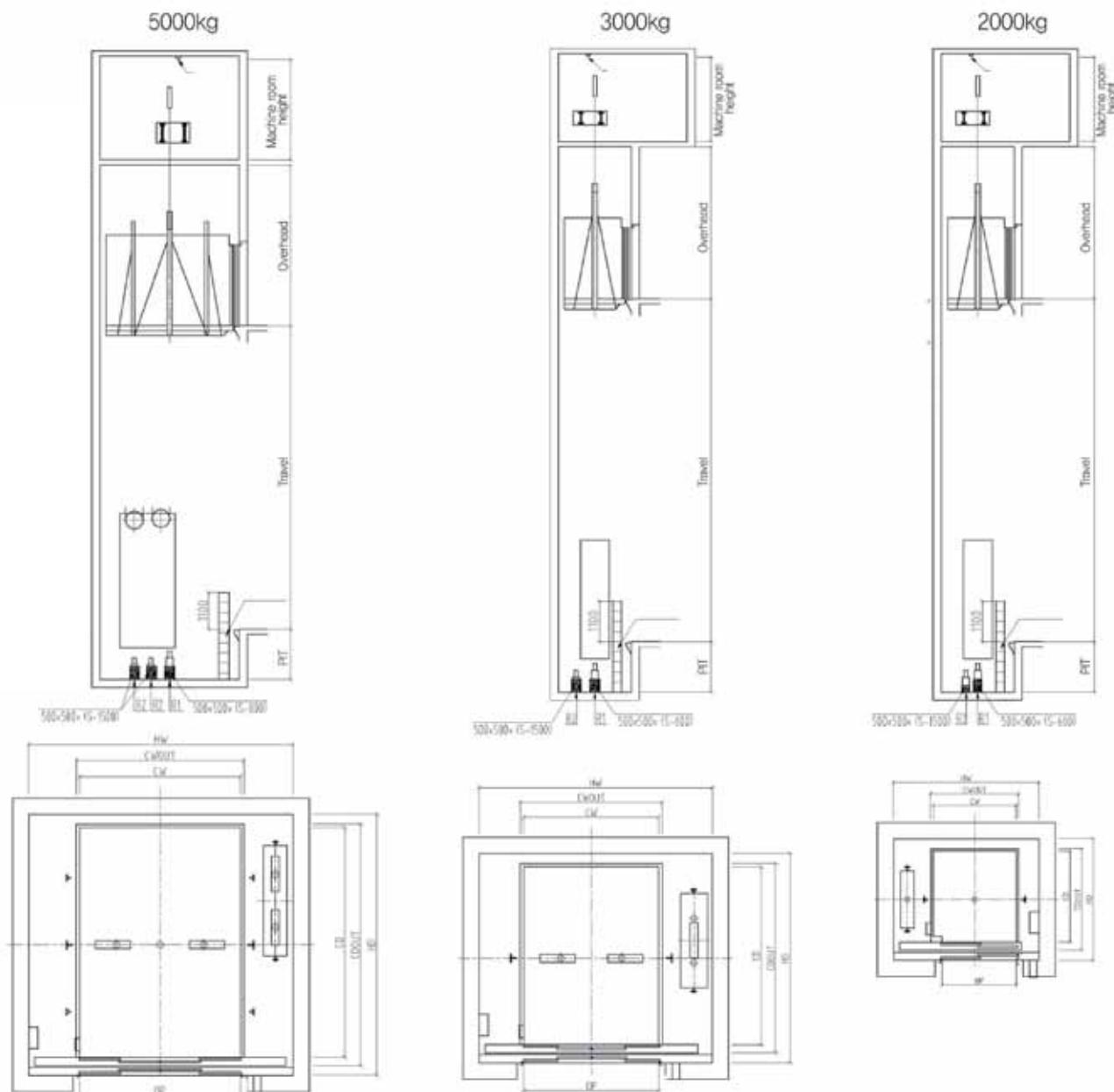
- 1/ Load capacity ≤ 2000kg Floor thickness : 4mm
- 2/ Load capacity > 2000kg Floor thickness : 5mm

| Hall Button



XHB4-A-BR38

Technical Data



Speed (m/s)	Load (kg)	Travel (m)	OH (mm)	Pit (mm)	M/C Room HT(mm)	Hook Load(Kg)
0.25	5000	16	4800		3000	4000
0.5	630	30	4500		2500	2000
	1000				2500	2000
	1600				2500	3000
	2000	4800	1500		2500	3000
	3000				3000	4000
	5000				3000	4000
1.0	630	50	4500		2500	2000
	1000				2500	2000
	1600				2500	3000
	2000	4800	1500		2500	3000
	3000				3000	4000

Speed (m/s)	Load (kg)	Door	OP (mm)	Car Inside Size(mm) CW X CD	Car Outside Size(mm) CWOUT X CDOUT	Hoistway Size(mm) HW X HD
0.25	5000	CLD2	2400	2400*3431	2500*3600	3950*3900
0.5	630	TLD	1100	1232*1262	1300*1500	2150*1800
	1000		1100	1432*1562	1500*1800	2350*2100
	1600		1300	1532*2162	1600*2400	2500*2700
	2000	CLD2	1500	1732*2262	1800*2500	2700*2800
	3000		2000	2000*2631	2100*2800	3450*3100
	5000		2400	2400*3431	2500*3600	3950*3900
1.0	630	TLD	1100	1232*1262	1300*1500	2150*1800
	1000		1100	1432*1562	1500*1800	2350*2100
	1600		1300	1532*2162	1600*2400	2500*2700
	2000	CLD2	1500	1732*2262	1800*2500	2700*2800
	3000		2000	2000*2631	2100*2800	3450*3100

Technical Data

Technical Features

I Operation Functions

● Standard ○ Option

Features	Description	
Enable Cancel Door Time with CCB	Under automatic conditions, while the door is fully open and holding period, it can be closed in advance by pressing the CCB button constantly.	●
Calls in Opposite Direction Auto-clear	Calls in opposite direction can be cleared automatically while the car moves up and down.	●
Delayed Car Door Close Protection	If the door opened for a predetermined time due to constantly pressing the hall call button or other reasons, the elevator will be forced to close to respond other signals. And in case the elevator fails to carry out DCP force-closure, the elevator will stop and the inside or outside calls will be cancelled automatically. And the elevator will recover to normal operation till it detects the door is closed naturally.	●
Door Time Protection-Open	If the car door does not open completely within an adjustable time (default 20s) after the door open command due to some mechanical problems or any other reasons, the elevator will cancel all the signals (including external and internal) and go to the floor nearby to release passengers.	●
Door Time Protection-Close	If there is no door closing signal, the elevator will automatically enter protection mode after the third door closing demand when it is blocked and exceeds the predetermined time limit due to some mechanical problems or any other reasons. It will resume normal operation only if the door closes successfully.	●
Full Load Non Stop	When a car is loaded to a predetermined percentage of its capacity, it is considered 'full'. Additional passengers would be unable to enter.	●
Parking Operation	That is stop switch, after the key which is installed at the predetermined floor been triggered, elevator will move to the predetermined floor after finishing response to all commands. At the same time, energy saving mode will start, cutting off all in car lighting and turning on all stop-lift switch indicator.	●
Parking	Elevators in a same group will park on different floors once idle in order to shorten the response time.	●
Floor of Lobby	Lobby can be set according to various requirements. If no registration of calls or operations after preset timeout, the car will return to lobby and wait there. Lobby should be the floor with maximum passenger flow or the first floor.	●
Electron Light Curtain Door Protection	Light red unit for special purpose enhanced the safety of elevator, a curtain can be formed in front of the car door, A quick response will be acted when something entered this area.	●
Top of Car Inspection	The inspection operation switch and its push buttons and an emergency stopping device 'TES' shall be placed on the car roof that they are readily accessible.	●
Electrical Recall Operation	An ERO device in the controller for emergency operation	●
Light and Ventilation in Car	After a preset timeout, the car will suspend in a minor power consuming mode, the light and ventilation device in the car will be shut down if no operations are registered.	●
Overload Protection	If the load exceeds the rated load, sound signal will be given out by speaker, and "OVER LOAD" will be displayed, the car door will not close, the elevator will not start.	●
Door Open / Close Button	The door open buttons in the car operating panel permits to open or re-open an automatic door and to keep it open/close it by constant pressure.	●
Independent Time Control of Car Door and Landing Door	Refer to the statistical information, the waiting time of door opening by hall call is longer than that by car commands. The system performance can be raised by adjusting the door hold time for both car door and landing door separately. The size of a possible stopping error depends on the type of drive and the accuracy of the position sensors.	●
Hall/Car Direction Indicator	To inform the passengers about the operation direction, there should be a Direction Indicator on car operational board or in the jamb of the car entrance.	●

Technical Data

Technical Features

I Operation Functions

● Standard ○ Option

Features	Description	
Hall/Car Position Indicator	Persons both in car and at landings (generally main landing) may see, where the elevator(s) are.	●
Intercom System	Provide emergency communication between passengers in the car, car top, platform(pit), the machine room or building staff in a security or maintenance room.	●
Alarm Bell	An alarm sound signal will be given out to the outside in specific conditions.	●
Drive Overheat Protection	Self-protection mode will be achieved if the temp of the motor exceeds the preset value due to the heat made by motor itself or the high temp in the environment. The car stops at the nearest floor, unload and shut down the light and ventilation device; once the temp falls down to normal, the car will recover.	●
Cancel Error Calls	Before the car starts, the registration of a call or operation can be canceled by double click of this button. After the car starts, registration cancel will not be allowed for the sake of passenger's safety.	●
Door Re-open	This function allows the door to reopen while there is a call in the same direction of the car in door closing process.	●
Reinitiate	When the power recovered from a cut, position signals cannot be given or the position cannot be detected, the car will move to lobby and reinitiate. After that the floor info can be displayed and the elevator backs to normal.	●
Terminal Protection	If the speed is not slowed to the preset value while the car reach the end floor, a forced deceleration will be carried out by system in order to protect the safety of the car.	●
Start Torque compensation	For better comfort at the car's start, computing the load in the car by system will make start smooth.	●
Door Close/Open Button Light	Door Close/Open Button will be highlighted if the buttons are pressed as a success echo.	●
Attendant Service Operation	The Attendant Operation feature allows semi-automatic operation with manual control.	○
Door Hold Button	Pressure on the Door Hold button 'DHB' in the car operating panel opens the door, reverses the door, and keeps the door open for a specified adjustable door hold time.	○
Emergency Fire Return Operation	If there is a fire in a building, the system will cancel all commands, control the elevator back to the fireman's floor to evacuate the passenger and wait for the fireman's operation after receiving a fire alarm signal. The control center will send the signal when the forced homing has been done successfully.	○
Emergency Fireman Service	When the operated switch inside the car is activated, the elevator will cancel all the call and only answer the command from the car to coordinate with the fireman's work and this function requires the coordination of fire lift.	○
Independent Service	In order to satisfy and cater for the customers' special requirements, independent service state is set up to make the elevator operation & its gate operation being controlled manually only.	○
Car Chime	On the top of the car, a bell ring will be given out when the car reaches the destination floor.	○
MSD device	When a sudden power cut happens, the device will work and the car will stop at the nearest floor, and after the leveling action, a sound signal will be given out and the door opens meanwhile for unloading.	○
Non Stop Button	Once the NSB button is pressed, all calls outside will not be registered, and the car moves directly to the destination floor.	○
Fireman's Service Light	Indicates that the car is on any kind of Fireman service.	○
Re-leveling Operation	Stopping errors shall be corrected by re-leveling when loading or unloading. The possible stopping accuracy depends on the type of drive and the position sensors.	○

Car Elevator

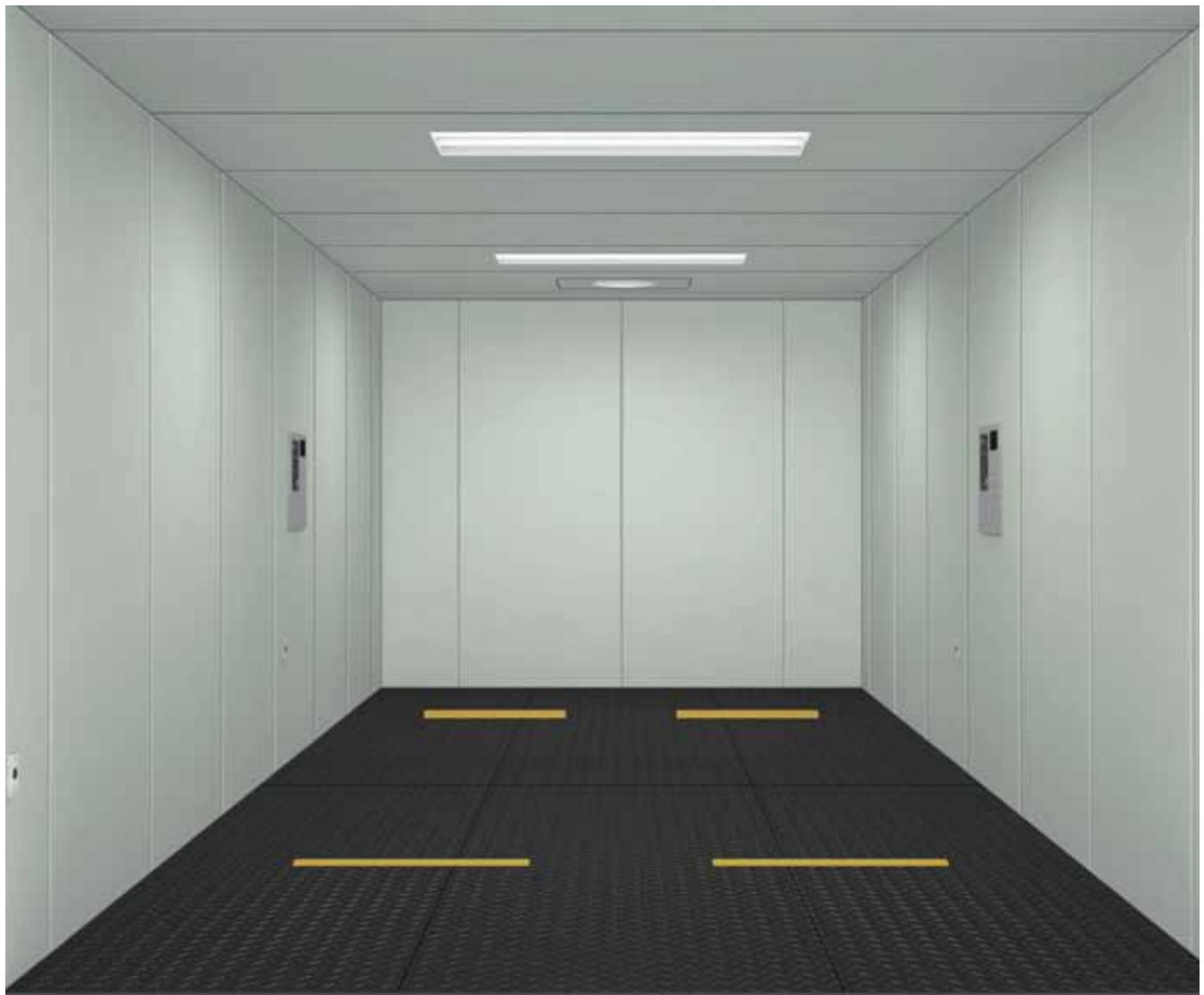


Car Elevator

With the development of elevator technology, elevators are no longer only for passengers. It can deliver cars to designated floors for parking which adds convenience to our daily life.

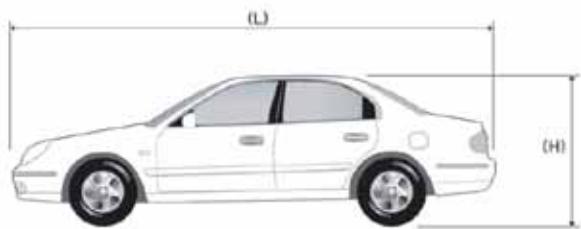
SIGMA Car Elevator

CDA-C01 | Elevator Design |



CDA-C01

Walls & Ceiling Design	C-CA1
Finish	SBC(Color No. LGP-943)
Car Door	None
COP	CBM-14C
CPI	Digital (included in COP)
Ventilation	Diffuser Fan
Flooring	Check Plate
Pfotocell Beam	Car Wall Both Sides
Car Stopping Bumps	Safety Angle



SIGMA Car Elevator

CDA-E01 | Elevator Design |



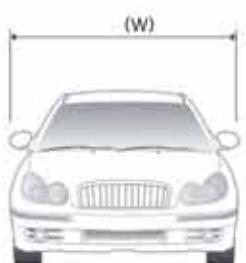
CDA-E01

Door Frame	SBC(Color No. LGP-943)
Landing Doors	SBC(Color No. LGP-943)
Flooring	Check Plate
HPI	VID-M432P
Car Status Indicator	Provided
Photocell Beam	Door Jamb Both Sides

Capacity and Allowed Dimensions

Capacity	Allowed maximum dimensions		
	(L)	(W)	(H)
2000kg	4800mm	1800mm	1700mm
2500kg	5200mm	2050mm	1700mm
3000kg	5200mm	2050mm	1700mm

Note. In case of SUV cargo vehicles, you may contact SIGMA Elevator



Designs

| Colors



| COP



CBM-14C(MAIN)



CBM-14C(SUB)

| Hall Indicator



VID-M432P



VID-M432

| Status



Car Status
Indicator



Hall Lantern

! The actual product can be different (changed) depending on design

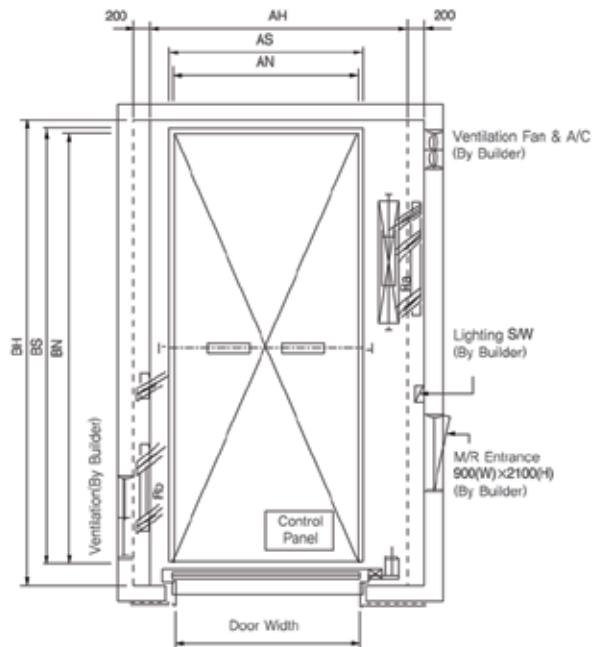
Technical Data

Technical Features

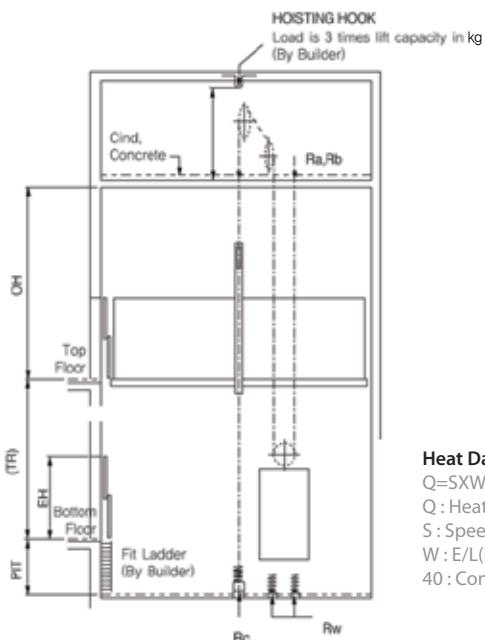
Section			2000kg					2500kg					3000kg											
			Rope type			Hydraulic		Rope type			Hydraulic		Rope type		Hydraulic									
Load (kg)			2000					2500					3000											
Speed (m/min)			30	45	60	20	30	30	45	60	20	30	30	45	20	30								
Motor Capacity (kw)			11	15	22	24	37	15	18.5	30	29	37	18.5	22	37	48								
Overhead (mm)			4200		4400		4200		4200		4400		4200		4200									
Pit Depth (mm)			1500					1500					1500											
Power 220v / 380v	Building NFB Capa (A)		1set	100/75	100/75	125/75	225/125	300/175	100/75	100/75	150/100	225/125	300/175	125/75	125/75	300/175	400/225							
			2sets	100/75	100/75	175/100	450/250	600/350	100/75	125/100	175/100	450/250	600/350	175/100	175/100	600/350	750/450							
	Building Transformer Capa (kVA)		1set	11	11	16	75	75	12	14	20	75	75	15	16	75	90							
			2sets	19	19	27	110	140	21	23	34	110	140	26	27	140	180							
	Service Wire Size (mm ²)		1set	22/8	22/8	38/14	80/38	125/50	22/8	22/8	50/22	80/38	125/50	125/50	38/14	125/50	200/80							
			2sets	60/14	60/14	100/22	250/100	325/150	60/14	60/22	100/38	250/100	325/150	60/22	60/22	325/150	*/200							
Grounding Contactor SIZE (mm ²) 1/2			14/14			22/38		14/14			22/38		14/14		22/38	22/60								
Car Insize ANxBN		Nomal		2350×5400					2500×6200					2500×6200										
		Through Type																						
Hoistway Size ANxBN		Nomal	1set	3650×5800		3450×5800		3800×6600		3600×6600		3800×6600		3600×6600										
			2sets	7550×5800		7150×5800		7850×6600		7450×6600		7850×6600		7450×6600										
		Through Type	1set	3650×5850		3450×5850		3800×6650		3600×6650		3800×6650		3600×6650										
			2sets	7550×5850		7150×5850		7850×6650		7450×6650		7850×6650		7450×6650										
Machine Room Insize ANxBN		Nomal	1set	4050×5800		2500×2500		4200×6600		2500×2500		4200×6600		2500×2500										
			2sets	7950×5800		2500×5000		8250×6600		2500×5000		8250×6600		2500×5000										
		Through Type	1set	4050×5850		2500×2500		4200×6650		2500×2500		4200×6650		2500×5000										
			2sets	7950×5850		2500×5000		8250×6650		2500×5000		8250×6650		2500×5000										
Elevator Door Type		Car		No Car Door		No Car Door		No Car Door		No Car Door		No Car Door		No Car Door										
		Landing		2panel Upsliding					2panel Upsliding					2panel Upsliding										
Elevator Door Dimension		Width (EW)		2350					2500					2500										
		Height (EH)		1800					1800					1800										
Reaction Load	Machine	Nomal	Ra	14300	15300	9000		18400	20000	13100		24500		13100										
			Rb	7700	7800	600		9000	9800	600		12200		700										
		Through Type	Ra	17800	19100	9000		23000	25000	13100		30600		13100										
	PIT	Nomal	Rb	9600	9700	600		11200	12200	600		15200		700										
			Rc	23000	31000	31700		32500	42500	36000		43100		51000										
		Through Type	Rw	18000	26000	11100		26000	3700	12100		36700		19100										
			Rc	28700	38700	31700		40600	53100	36000		57600		51000										
			Rw	22500	32500	11100		32500	46000	12100		45900		13100										

Layout

I Hoiswtay and M/R Plan (Traction Rope Type)

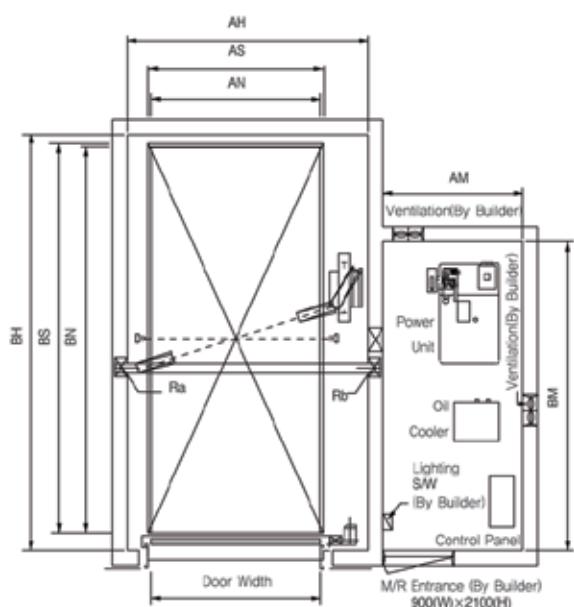


I Section

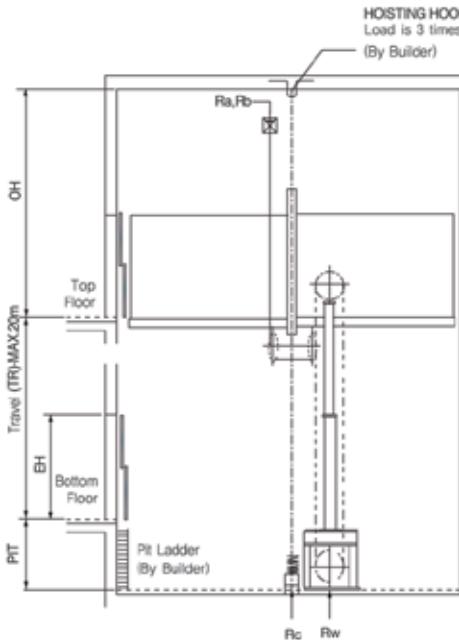


Heat Date
 $Q = SXW/40$
 Q : Heat(kcal/h)
 S : Speed(m/min)
 W : E/L(kg)
 40 : Constant Number

I Hoiswtay and M/R Plan (Hydraulic Type)



I Section



HOSTING HOOK
 $Load is 3 times lift capacity in kg$
 (By Builder)

Heat Date
 $Q = (585XPXTr) / (51+TrX2)$
 Q : Heat(kcal/h)
 P : Motor Capacity (kW)
 Tr : Travel Time (m/sec)
 TR : Travel (m)
 585,51 : Constant Number

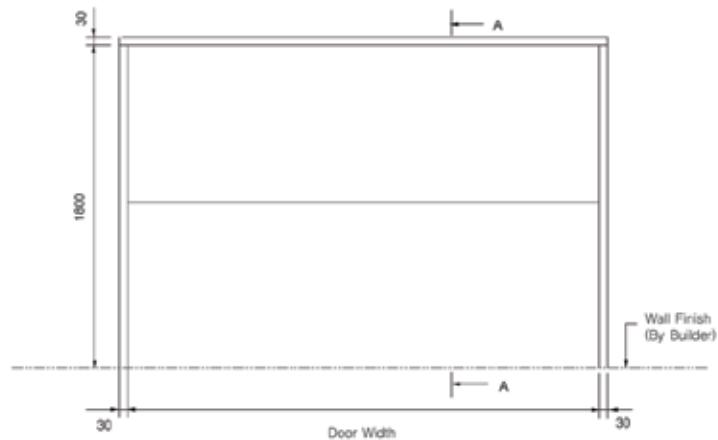
Heat	Tr
20 (m/min)	$3TR+3.35$
30 (m/min)	$2TR+3.35$

Note

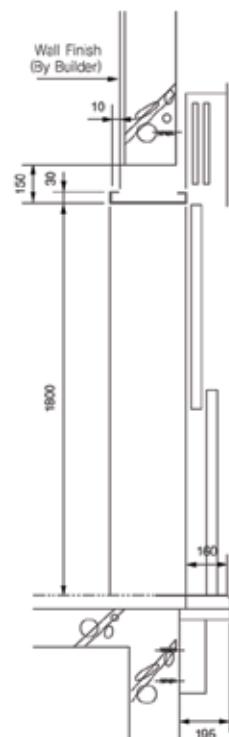
- Overhead from FFL top floor to bottom of shaft ceilings slab
- Pit depth from FFL bottom floor to top of shaft floor slab

Layout

| Entrance Front View



| Section A-A



| Structural Opening

